THE FUTURE OF DEVELOPING ECONOMIES

THE FUTURE OF DEVELOPING ECONOMIES

A. M. Khusro

INDIAN COUNCIL FOR CULTURAL RELATIONS

The Future of Developing Economies

Published by
Secretary
Indian Council for Cultural Relations
Azad Bhavan
Indraprastha Estate
New Delhi-110002

Printed in India by
Navchetan Press (P) Ltd.
at Navjeevan Printers
1 E/2, Jhandewalan Extension
New Delhi-110055

Secretary's Address

Dr. Khusro, ladies and gentlemen

It gives me great pleasure to welcome you to the 17th Azad Memorial Lecture. These lectures, as you know, were instituted in 1958 by the Indian Council for Cultural Relations as a mark of honour to the memory of late Maulana Abul Kalam Azad, the founder President of the Council. The Azad Memorial Lectures are intended to contribute to the promotion of better understanding among different peoples

of the world. They are an attempt not only to honour the cherished memory of this great Indian leader, but also to keep his values and aspirations alive.

It is a happy coincidence that the subject the distinguished speaker, Dr. A.M. Khusro, has chosen for his lecture today—The Future of Developing Economies—is closely related to the UNIDO III Conference which was recently held here.

If I may say so, Dr. Khusro has chosen a challenging subject for this lecture. Meaningful reflection on this theme, correct identification of the problem-areas of the future and suggestions for policies and programmes to lift the economic and social levels of the developing economies, require not only the knowledge of the present-day structures of developing societies and the existing upward or downward trends but also a great deal of imagination and realism in making assumptions about future trends and prospects. The major problems of the developing economies, even when solvable, will admit of alternative solutions. The effectiveness and the costs of these solutions will differ and choices would have to be made with a great deal of 'feeling' for the situation and with a discerning eye.

The future of the developing countries will no doubt largely depend on the internal policies and efforts of these countries themselves but also, quite

importantly, on the cooperation and resources obtained from the developed world. At the moment this cooperation seems to be running into some difficulty and therefore any reflection on the future of the Third World would have to envisage some solutions to the problems of cooperation between the developed and developing countries, aside from cooperation, trade and investment within the developing countries. This needs a little explanation

Despite the major efforts in the last thirty years for the economic development of poor countries, it is astonishing how much poverty and under-development remains both in absolute and relative terms. Population explosion continues; the availability of food and other agricultural products has barely kept pace with population growth. A great deal of expansion in world trade since the second World War and a great deal of import substitution has still not reduced very much the dependence of the Third World countries on the developed nations in terms of investments, industrial equipment and new technology.

I am sure that Dr. Khusro's awareness of these issues—since he has himself participated in many a dialogue on the solutions to these issues - would enable him to identify the problems, analyze the issues and suggest policies and programmes for a better future of the Third World. For more than a

quarter century, Dr. Khusro has taught economic analysis and economic policy in Indian, British and American universities. In particular, he has been concerned with teaching and research in the fields of macro-economics, monetary theory and policy, fiscal analysis and the analysis of the agricultural and industrial sectors of developing economies. Dr. Khusro has represented the country in various international conferences. He has published a large number of important books and technical papers in India and abroad and has guided several doctoral and other research works of considerable importance. He is keenly aware of the economic problems of the developing as well as the developed world and of the Western as well as the Socialist economies. As a Director of the Reserve Bank of India for many years and a member of numerous other distinguished forums for economic analysis and policy, his analysis and projection regarding the future of developing economies should be quite rewarding and illuminating.

Smt. Manorama Bhalla
Secretary
Indian Council for Cultural Relations

The Future of Developing Economies

To say that I feel singularly honoured in being asked to deliver the Azad Memorial Lecture of the year 1980, would really amount to completing a formality. In actual fact I confess to a feeling of great humility on the one hand and pride on the other in being associated with the name of Maulana Azad. The Maulana was an erudite intellectual, a wise man, a statesman and an embodiment of extraordinary cultural values. During my student days I benefited from a number of his

writings including the back-numbers of *Al Hilal.* I admired his intellectual robustness and courage of conviction and I deem it a piece of good luck that I have been asked by the Indian Council for Cultural Relations to give the lecture in his memory. I propose to speak on "The Future of Developing Economies" as I believe it is worthwhile and even necessary to look hard at the future. We spend so much time discussing and analysing the past but very little in peeping into the future. As Nawab Ali Yavar Jung once put it, "Even the quarrels and enmities of our old days acquire a quaint flavour. We are never so charitable as with our past and imagination seldom runs its course so riotously as when it runs backwards. Indeed, if we could spend half the imagination on the future that we usually spend on the past, the world might have been different."

The Twentieth Century

The twentieth century of the Christian era has been a century with a hitherto unprecedented pace of change, giving 'future shocks' to millions of people. Whole countries and continents have woken up from their eight-century slumber and taken great leaps forward, some catapulting themselves into the twelfth, some into the sixteenth and some into the twentieth centuries. We who are blessed to live in the twentieth century are doubly blessed. From the present vantage-point, but looking ahead, we can

see a breathtaking vista of achievements; we have explorations of space, landings on the planets, discoveries of new galaxies, outbursts of science and technology in such realms as physics, bio-chemistry, computerization, engineering and architecture as well as social transformations of considerable magnitude. Also from the present vantage-point, but looking back over our shoulders, we have the attitudes, cultural patterns and even physical manifestations of many a past century. Living in what is currently termed a developing society is an amazing experience. Without bringing in value judgements as to which is better and which is worse, it is clear that half the time each day of our existence, we live with modern styles and attitudes; but the other half is spent with modes of thinking and living which belong to ages gone-by. We still have the hierarchical domination, the gripping social taboos as well as the graces of feudalism—respect for the elders, the powerful and the wealthy, regard for tradition, marrying within one's social status and with the elders' approval, offering our prayers and sacrifices and nursing our beliefs and superstitions.

Thus the twentieth century is a most astonishing mixture of many past centuries telescoped into one another and many a glimpse of things yet to come. The twenty-first century is also destined to be a great century for scientific developments, technological break-throughs and social revolutions and

transformations, new spaces conquered, new sources of energy tapped, new short-cuts to hard work, and maybe some new combination of genes to endow human beings at birth with the desired qualities of intelligence, bravery, justice, mercy and nobility as also the undesirable attributes of hatred, injustice and cruelty. The twenty-first century will also probably be a great century for a massive redistribution of the good things of life, providing to the down-trodden and the lower income groups, the numerous benefits currently available only to the upper strata of society.

However, it can be asserted confidently that in several important areas of life, the twenty-first century will not be able to equal the pace of change which we have been blessed to witness in the twentieth century. In particular, in important areas like home and work environment and national and international transportation and communication, what has happened in the twentieth century is perhaps the peak, the last word and cannot be improved in the forthcoming centuries. This needs explanation.

Only about 100 years ago, and for many of us during our childhood, the situation was that in the area of home environment things were very much akin to the fourth, eighth and the twelfth centuries. We did not have modern sanitation, while health measures, medicines and drugs were of the same

variety and quality which existed a thousand years ago. As there was no electricity, there were no electric heaters or cookers, there was no radio, nor refrigeration, nor air-conditioning, nor the telephone, nor the television, nor the rest of the gadgetry that is now very common. All these have come to be within the last fifty or at the most a hundred years. It is not possible to improve upon the situation any further within this important area of home and work environment except marginally and except to make the benefits percolate down to the have-nots. And what is more, even if we allow our imagination the wildest free-play, it is becoming almost impossible even to think of fantasies which equal the sea-change of the last century or so.

One hundred and fifty years ago if someone were asked what great and revolutionary change one would desire to have in one's home and work environment, one might have said: "I want to press a button and get my living room illuminated; or I want to cook my food through pressing a button, or I want my room to get the temperature I desire with merely a push-button gadget, or that I want to talk to my friend living 5,000 miles away by merely dialing a number from my home." These were fantasies not within the realm of possibility but have become ordinary life-styles almost during our life-time. Today if one is challenged to mention other innovations and dreams that one would like to see fulfilled in the home and work

area, one would be hard put to it even to mention anything comparable. Apparently, the improvements are reaching a limit.

In another important area of daily life—transportation—the changes of the last century or so have been so phenomenal that they cannot be equalled in any future century. A little more than a century ago neither India nor any other developing country had the railway. A few years before that no country of the world had it. At that time it would take, say, three months to travel in a bullock-cart caravan from Madras to Delhi. The railways arrived and the time was cut short from three months to three days. The pace of things then became faster and when the Dakota airplanes arrived about 40 years ago, it took, say, six hours to travel the same distance. Thirty years ago when the Viscounts were substituted for the Dakotas, it took a little over four hours and when the Caravelle jets replaced the Viscounts, the time dwindled to three hours. With the arrival of the Boeing 737 it takes less than three hours to do the job. Thus, in a little more than a century, the time taken to travel 1,500 miles has come down from three months to three hours. It is possible that with great innovations and a technological upsurge, the time would be reduced further, say, to 30 minutes in the next fifty or hundred years. But it can be demonstrated that the change from three months to three hours within a century is a much faster change than that from three hours to

30 minutes. Apparently, in this department too we are reaching the limits and further improvements are not going to be impressive, nor perhaps worth having. What is really worth having now is to make the benefits emanating from the ingenuity of mankind available to the vast masses of the world's downtrodden populations. This is what is not happening at a reasonable pace. The absolute levels of the low income classes in food and nutrition, clothing and housing, medicine and health, entertainment and the use of durable consumer goods are improving but not satisfactorily. The relative levels are certainly not improving and there is massive evidence of relative poverty persisting and enlarging itself within most developing countries. Similarly, the relative poverty of the developing nations *vis-a-vis* the developed nations has been growing, even though in some segments of life the absolute levels in developing societies have perhaps improved somewhat.

The Economic Problems

The present-day economic problems of the world basically result from:

(a) a failure of the Third World to control an unprecedentedly rapid growth of population;

(b) a failure of the Second and the Third

Worlds to augment the food and agricultural production—and farm productivity—in line with needs;

(c) a failure of the Third World to redistribute its products so as to meet the needs of its low-income population;

(d) a failure of the First World to control excessive consumption which is becoming a serious drag on the globe's exhaustible resources;

(e) a failure of the First World to transfer some of its resources and technology to low-income countries through a suitable mechanism; and

(f) a failure of everybody—except the poor—to conserve energy through a restraint on the consumption of goods and services.

The present discourse is not a lecture on futurology, but knowing, to the extent we do, the ground-level situation and the trends in the major variables of developing economies, is an attempt to analyse some of the gaps that are likely to emerge and to reflect on some ways of closing these gaps. Some would say that one need not be too much concerned about the future. 'What has the future done for us that we should do

something for the future?', they would argue. But apart from the ethical argument that we should invest for our progeny more than we have received from our ancestry, there is the compelling reason that the future we are talking about is the next half century; it is the kind of long run in which we are nearly all alive; it will actually soon be the present and the past for most of us, and most of us will live through some part of it. That is why, even from our selfish stand-points, these problems have to be tackled. To be sure, these problems are essentially dated and of a temporary nature, but unfortunately for the present generation, the temporariness will last for the next 50 to 70 years. After the year 2030 or, more confidently, 2050, the problems will be of a different character both in the developing and the developed economies of today. By that time, the world's population including the population of the present-day developing economies would have stabilized itself and would cease to grow. Birth rates would be no more than death rates and the supply of agricultural and industrial goods would keep pace with the requirements and would perhaps grow per head of population if suitable mechanisms are developed. Alternative sources of energy would have been found and a re-distributive mechanism would have been, hopefully, created both nationally and internationally. However, humanity will always be left with some crucial problems such as the problem of ageing, the problem of excessive leisure, the problem of

misuse of scientific inventions and so on. Karl Marx was once asked whether, when the golden age of socialism is fully established, humanity will be free from all its problems. He replied to the effect that even in such a golden age problems will remain. Under socialism, he said, man ceases to suffer as an animal but continues to suffer as a human; he thus elevates himself from the plane of the pitiful to the plane of the tragic !

In the current phase, failure to control population growth is a key failure of the Third World. In 1775, speaking in Parliament about the then American colonies of England, and reflecting on the rapid multiplication of their population, Edmund Burke said: "State the figure as high as you please, while the dispute continues the exaggeration ends!" That seems true of the Third World today. However, birth rates in many developing countries have been slowly declining, in particular in the masses of humanity that are China and India, accounting for one-fifth and one-sixth of the world's population respectively.

There are indications that birth rate in India has come down from 41 per thousand in 1961-71 to 34 per thousand in 1975-77. It is bound to decline further and there is no doubt that the acceptance of family planning would be at a faster rate than hitherto. The death rate in India which had declined quite rapidly to 15.9 per thousand in 1971

has since declined only marginally to 15.2 in 1977. It is expected that following further improvements in health and medical facilities and other reasons, death rate will come down to 9 or 10 per thousand by the year 2000.

In some parts of India like Kerala, the fertility rate has gone down owing to the lifting up of the age of marriage among females, quite remarkably, from 17½ years to 20 years. Kerala has thus been changing its population profile. Fertility rates have also declined in Tamil Nadu, Maharashtra and Gujarat, but this is not owing to any significant change in the age of marriage but rather represents a better performance in the family planning front. Even so there is a great deal of population explosion potential still left in India. For one thing, the population structure has been changing in favour of younger people who have a higher life expectation and, for another, child mortality rate has not declined recently in quite the same measure as in the past. All in all it appears that India would be left with a population of about 925 millions in the year 2000, and that population would still be rising in line with many other developing countries.

In that other mass of mankind, i.e. China, some significant dent has already been made in the population problem. Despite the haziness of information, it is clear that China has successfully

reduced the mortality rate through various measures including the availability of bare-foot doctors, community medicines, mother, infant and child care etc. at the grass-root level of the communes and the work-brigades. Simultaneously, it has succeeded in preventing early marriages and the age of marriage appears to have gone up among females to 24 per thousand. This has significantly brought down the fertility rate in China, although there are some indications that in very recent times the fertility rate may have slightly increased. Nevertheless, China has succeeded in reducing the growth rate of its population to 1.6 per cent per annum, in comparison with India's 2 per cent per annum or a slightly lesser rate.

Several other developing economies have also made small dents in population growth but many of them still have higher population growth rates than China and India. Pakistan, for instance, has a growth rate of 3.5 per cent per year. The growth rate of developing economies as a whole is 2.6 per cent compared to 1 per cent for developed countries and 1.9 per cent for the world as a whole. Population explosion is getting into every important thing in the LDCs. If the educational programmes are tottering, if unemployment is increasing, if national discipline is at a low ebb, if there are serious shortages of housing and health facilities or if there is a decline in the quality and integrity of various services in the LDCs, one may be sure

that it is nearly all due to explosive population. growth. The Third World countries would have to run vigorous and persuasive family planning programmes and implement these in a rather subtle manner so that resistance to family planning does not develop. Age at marriage would have to be raised, female education as a motivating force for family planning emphasized and incentives for population control provided.

It seems possible that if the developing countries take their population policies seriously and adjust these policies suitably, the population growth rate of the developing world will decline from 2.6 to 1.6 per cent on an average between 1980 and the year 2000. However, whatever assumptions we make about future population policies and family planning programmes, the additions to population that have already occurred in recent years will continue the flood in the labour and the food markets and will necessitate major efforts in food production and indeed in industrial goods production.

From a recent study undertaken by the FAO, it would appear that the growth in population in the developing world has been paralleled in recent years by an increase in food supplies but that the gap in consumption levels between developed and developing countries has widened. Moreover, as population-control policies and strategies have an impact initially only on the high income populations

and as low income people have a high content of food in their budget, the requirements of food grow faster than population. This is the reason why the number of people in the developing countries below the critical level of food intake, increased from about 360 millions around 1970 to about 450 millions around 1975. The great challenge that the developing countries face today is first to achieve a significant acceleration in agricultural production and then to ensure that the low income classes get a fair share of production.

As I mentioned in another context[1], "In the last 10 years, there have been many studies of the dimension of the world food-population problem. All of them suggest a catastrophe in the offing. There are other crises brewing simultaneously—the crisis of emerging ecological imbalances, of environment, of energy. Such crises have occurred earlier, too, as and when, with Malthus, humanity feared a massive extinction owing to a food-population imbalance. But, as important as any crisis, is man's ingenuity in surmounting the crises and man's sympathy and cooperation with man in devising together the means of conquering the crises." In fact, if economic science has escaped being a dismal science it is because of man's ingenuity in introducing technical change which has again and again pushed back the oncoming crises.

---

[1]"Food and Higher Education", Convocation Address at the Agricultural University, Bangalore.

By all accounts, the food-population crisis currently unfolding itself is very serious. The chances are that the population of less developed countries, already about three billion, has been growing at about 2.5% per year, and will cross 4 billion by or very soon after the turn of the century. By contrast, the population of industrialized countries has been growing at less than 1% per year. At the same time, the developed world is highly competitive in terms of grain yields which are 5 times more per hectare and 11 times more per farmer in comparison with the Third World. It is a fact that where population growth is highest, the availability of food is stagnant or is increasing very slowly. It thus appears that there is no world-wide crisis, but a serious regional crisis in food. In spite of high productivity the developed world does not have sufficient surpluses to meet the colossal draft from the Third World. The surplus food producing countries—the United States, Canada and New Zealand—typically export about 100 million tonnes annually. In a reasonably good year, the main importers—Western Europe, Japan, Eastern Europe, the USSR, China and the Third World—are satisfied with this tonnage. But when bad years in the food importing regions happen to coincide with droughts in the surplus regions, there emerges a serious food crisis as happened between 1972-74 or even in 1975. Prices of wheat increased three-fold to US dollars 250 per metric tonne. The prices of corn more than doubled and of soyabeans nearly

doubled. These crises are expected to repeat themselves in the near future until the population growth rate of the Third World comes down below 2% and their additional grain supplies increase at a rate faster than 3% per year. As the requirement of 150 to 200 million tonnes in the Third World cannot be met from the surpluses of the exporting countries, it has been argued that the Third World must grow a good deal of its own food and make the least possible demand on industrialized countries. The solution to the problem would seem to be as follows:

(a) The developing countries must attempt to lift themselves up by their bootstraps and undertake investment, to the best of their ability, in agricultural and food technology, in resource development—land development, prevention of soil erosion, afforestation, irrigation, seeds, fertilizers, manures, pesticides and implements—and indeed in human skill formation for agricultural requirements.

(b) The developed countries must undertake more rather than less food production, help build up world food stocks, and resort to food trade and food aid—more trade than aid.

(c) There should be a transfer of agricultural technology and a transfer of resources—

> including trained manpower resources—from the developed to the developing world. As food has to keep pace or more than keep pace with population growth in the Third World and as food and agricultural production again and again tends to reach a technological plateau it is essential to prevent the plateau from being reached. Research and Development should be promoted vigorously by devoting a good deal of resource to this area. The already known technologies and techniques like fertilizer combinations, high-yielding varieties of seeds and relevant implements must spread to all those farmers who have not yet adopted the new techniques.

To be sure, the food population crisis is a dated or a time-bound crisis. If the developing world succeeds in reducing its population growth from 2.5 to 2 and then 2 to 1.5 per cent per year and the per capita increase in the food consumption of the developing world goes up from 0.5 to 1 and then to 1.5 per cent per year, the crisis would be over, as the food availability of the developing world would then match the food demand by the population.

Some Difficulties in Evolving Solutions for the Economic Problem

Much of the developed world is wasting resources

by giving more and more benefits to those who already have them as between nations and within nations. Unto those who already have shall be given, is the order of the day. There is a rat-race for acquiring more and more on top of all that one already has. It is clear that the marginal benefits that accrue through giving more to those who already have a lot, are far smaller than the vast benefits that will accrue by an equal resource transfer in favour of those who do not have. All the economic, social and ethical logic in the world is in favour of redistributing the gains of science and technology in favour of the have-nots. Furthermore, the pace at which goods and services are being produced for those who already have them is so rapid—in fact the race is so mad—that a great deal of the scarce energy resources, and indeed, the exhaustible resources of the globe, are being most criminally and wastefully tied up in excessive consumption. Environmental pollution is reaching a high level. The Club of Rome studies and many other studies are a sad commentary on the madness with which human beings are managing or mismanaging their affairs currently.

The heartening thing, however, is that these disastrous trends have already been noted and analyzed to some extent, but the decision makers of the world are so far powerless to reverse the trends. No satisfactory mechanism exists so far in the developed world to restrain consumption. Rich consumers, both nationally and internationally, continue to

demand more and more, and suppliers, irrespective of consequences, continue to supply more and more, advertise their products more intensively and generate a larger and larger demand again irrespective of consequences.

While the developed world will soon be impelled through one disaster and another to evolve, although with many frictions, a mechanism to restrain consumption, prevent the exhaustion of resources and reduce pollution, the challenge for the developing economies will be to prevent a non-egalitarian mad race for excessive consumption by their own rich or well-to-do populations. Programmes and policies of developing economies must focus as much on the redistribution of their incomes in favour of the poor, as on additional production of the essential goods and services, in particular, food, agricultural raw material, clothing, housing, water supply, health and medicine, simple entertainment and a free enjoyment of local cultures.

If 30, 40 or 50 per cent of the LDCs' population currently living below the poverty line, is to be lifted up above the poverty line in a relatively short span of time, two alternative approaches would have to be evaluated and one of them chosen in any given country for implementation. One alternative is to have a distribution oriented strategy, subject the well-to-do producers, traders and consumers to direct and indirect taxes, use part of the

receipts for capital formation (growth) and transfer a part through subsidies and welfare programmes etc. to the poor to lift them up. In this strategy the growth rate of the economy may end up in being, say 3.5 per cent per year but the absolute levels of the poor will be lifted up. The other strategy is not to bother initially about income distribution at all but allow a speedy growth, speedier than in the previous case, by imposing a lesser tax rate on the upper brackets and leaving them adequate incentives for capital formation. This may end up with say a 5.5 per cent growth rate but it is expected that the tempo of growth will itself catch in its net the below-poverty-line strata and lift them up.

The choice between the two strategies, vastly different from one another, is not self-evident and would have to be analyzed in the light of LDC experience.

The production of the essential goods and services required to annihilate absolute poverty and to reduce relative poverty cannot be achieved without the well-known processes of investment in infra-structures and capital goods which will in turn generate consumer goods and services. This can partly be done through an emphasis on savings and investment within the developing countries and full exploitation of already known technologies, transfer of savings and technology from the richer nations to the poorer ones, enhanced trade between developed and

developing countries and improved trade within the developing countries. In fact, there is substantial scope for resource transfers between the developing countries through a process of intra-Third World investments in infrastructures, capital goods, and agricultural and consumer goods production. All this is more easily said than done. I should like to discuss the possibility of resource transfers from the developed to the developing economies, that is, the North-South trade and investment relations and then take up an analysis of the prospects for intra-Third World, that is, the South-South trade, and investment. And finally, some possibilities for production and redistribution at the national level in developing societies could be mentioned.

Elimination of Conflict between National, Regional and International Trade and Development

It can be demonstrated that three kinds of economic efforts can be simultaneously organized in such a manner that they reinforce each other and economic benefits accrue to all concerned. These efforts are:

(i) National economic development;
(ii) Intra-regional cooperation (South-South relationship); and
(iii) International cooperation (North-South relationship).

To begin with, developing countries could have a

foreign trade objective and make it an important part of the objectives of general economic planning and policy. In recent times the North-South dialogue on trade and investment has run into what are perhaps temporary difficulties. The fifth UNCTAD and the UNIDO conference in New Delhi have not led to any worthwhile prospects of resource transfer. The earlier proposals to transfer one per cent of national incomes of the rich countries to poor countries has not got implemented. The recent proposal to have a fund approaching 300 billions in the year 2000 has not been accepted. The developed countries are so pre-occupied with recessions in their own economies and the need to have more production and employment at home, that they are not willing to relax tariff barriers and quotas for the goods of the developing countries. In any case, North and South countries will not adopt a cooperating trade and investment approach by mere exhortations or discussions in international forums; they will be motivated to adopt it if their own self-interest is clearly discernible. It is one of the intentions of the present discourse to demonstrate precisely this.

National economic development, especially of developing countries, could be so designed, even at this late stage, that apart from achieving its national objectives, it links up with South-South trade and investment on the one side and with North-South trade and investment on the other.

If North-South relationships have had a temporary setback and South-South relationships have not yet developed, it does not follow that developing countries should get back into their own shells and talk only of self-sufficiency. That would be counter-productive both for themselves and for others—both of the North and the South. Self-sufficiency through import substitution should be planned only wherever it can be demonstrated to be feasible and economically defensible; and mutual dependence through trade and investment should be developed wherever it can be shown to be possible and more rewarding. Self-interest of developing countries does not lie in self-sufficiency alone. Self-interest consists of self-sufficiency plus trade i.e. self-sufficiency in some lines and trade in other lines, both according to comparative advantage. Thus the right balance between import substitution and export promotion has to be worked out for each country and trade and investment adjusted accordingly.

The moment it is decided to adjust trade internationally, the question arises: trade in what goods? At one remove this becomes a question of what a country should produce and specialize in for the purpose of export and what it should import from other countries, leaving it to them to specialize in and export. Here we are right in the thick of the theory and practice of international division of labour or specialization.

International trade can either follow the existing international division of labour or can evolve a new direction of specialization based on natural endowments. Attempts, sometimes under the auspices of international organizations, to make countries specialize in certain lines based either on current feasibility or on existing compliment-arity have not succeeded. They will not succeed until specialization is based on natural or inherent endowments, that is to say on low comparative costs. The idea of developing a future direction of trade, based not on existing comparative costs but on an assessment of future comparative costs—in turn based on an assessment of relative endowments—already exists and will be spelt out presently. But the countries of the South as well as those of the North would be well advised to follow the precepts of dynamic comparative advantage based on endowments and relate their trade and investment efforts to these precepts.

South-South Trade and Investment

Regional Trade Within the South

Meanwhile it is obvious that the oil producing and exporting countries (OPEC) all of which are developing nations (of the South group) have a problem of what to import against oil exports and where to invest the proceeds of these exports. These countries appear to have a preference, largely

based on historical flows of trade, for North-South trade, that is, for importing both consumer goods and capital goods from the advanced countries. They have not explored sufficiently the possibilities of South-South trade, that is, selected low-cost and high-efficiency imports from the developing countries. They import largely some traditional commodities like rice and textiles from these developing countries.

Now, it has been repeated 'ad nauseum' in international forums that all developing countries are approximately at the same stage of industrialization have the same kind of requirements for imports and all produce the same kind of primary commodities, so that the chances of trade between them are minimal. In other words it is said that the developing countries are competitive with each other and do not have mutual complementarities. This is simply not true and must be questioned seriously.

In actual fact different developing countries are at very different stages of development and have vastly differing resource bases. Some of them have had, at any rate, in some segments, like textiles and jute manufactures, a hundred years of industrialization; others have begun the industrial process only recently. Some of them are labour-surplus countries while others are absolutely short of labour. Some have a vast agricultural (food and raw material) base while others are producers of mineral wealth. Some are

oil-rich while others have not a drop of oil. In the case of nations, as in the case of individuals, destiny generally seems to be divided into three parts. When nations begin to grow, they first begin to invest in housing, real estate and other basic amenities of life (unless the governmental or planning authorities ordain things differently). Investment in land and buildings and earning rent therefrom is a relatively simple process and comes naturally to everybody: this is the first stage. As experience with economic activity widens and the resource base grows, the next stage is to go into trade and commerce: this is also being done in a big way by many developing countries. This prepares the way for complex organizations and sophistications and then the third stage of producing, manufacturing and exporting of manufactured or processed products is reached.

Some developing countries, having gone through the earlier stages, have now arrived, in any case in some sectors of their economies, at the third stage of sophisticated manufacturing and exporting. As some of them have a good raw material base and large quantities of semi-skilled and skilled labour, they are successfully combining new technology with these advantages and are able to produce not only primary commodities, not only the traditional agro-based products like textiles, but also steel, cement, chemicals, light and heavy electrical goods and a whole range of engineering goods at a

cheaper cost than the sophisticated (but expensive) developed countries. They are in a position to set up, and are already setting up, whole industrial projects for other countries on a turn-key or other basis. These developing countries are in an excellent position to sell a great variety of producer goods, and even consumer goods to the other developing countries, especially to the high-income oil-producing countries, not to mention the food and raw materials which they are already exporting. If the oil-producing countries paid attention to the cost aspect, they would discover that they can obtain from the more sophisticated among the developing countries, at a much lesser cost, a large part of their requirements of capital goods and equipment, the requirements of their building industries, mining industries and transport industries like railways, road and ship-building and services like banking, finance, insurance and shipping and numerous other items. This, no doubt could be done at a saving of billions of dollars, especially when transport distances are also less.

In this context I should like to recommend the formation of multi-national corporations within the developing countries themselves. The ownership of these corporations can be spread out in several developing economies. These corporations can then become major instruments of transfer of technology—technology already available to some developing countries and transferable to others. By

not using their oligopolistic or monopolistic powers, the LDC multi-nationals could become truly beneficient and non-exploitative instruments of trade and investment within the countries of the South.

Any analysis of costs at which capital goods, intermediate goods and services are available to the countries of the South from within the countries of the South, will reveal that on the whole a large range of such goods and services can be obtained more cheaply from within the South countries than from the North. In fact such a study even of current comparative costs—leave alone future comparative costs—should be promoted immediately either by the OPEC themselves or by an international organization like the ESCAP. It is one of the most urgent needs of the time.

Regional Investment Within the South

While low-cost supplies of capital goods, intermediate goods and services are available for exports from within the South, and the high demand countries of the South can greatly profit by importing them against oil supplies or other things, one must go beyond the trade possibilities and examine the investment possibilities within the group of the South. In fact if such investment became a reality it would itself be the cause of expanded production and trade within the South.

Most developing countries, almost by definition of the term 'developing', have been net importers and net borrowers. To build up their economies they have to import capital goods and technology and as their own domestic savings are not enough (owing to their low income), they have to borrow from the developed countries. Vast quantities of foreign debts have thus emerged and the problems of rescheduling, writing off and adjusting the interest rates etc. have arisen. Among all the developing countries, it is the oil-producing and exporting countries alone, which have been from the beginning of the 1970s, net lenders and investors of capital rather than be net borrowers. Their oil earnings have given them an investible surplus which they have proceeded to invest wherever they found security and a relatively higher rate of the return on investment.

According to well-known laws of investment, the first acquisitions of assets are invested by a nation, as by an individual, in bank deposits and real estate (lands and buildings) in order to earn relatively simpler and safer forms of return, and are then diverted into the ownership of equity capital in safe ventures like hotels, banks etc. If the investments are very large, as the OPEC investments certainly are, near saturation points are soon reached and return in these ventures decline. Investors then turn towards other lines and the next lines of development are trade and commerce.

Investment in import-export corporations, banks, insurance companies, etc. begin to occur. As these lines also reach saturation points and show diminishing returns, and as oil earnings and asset formation continues at a slower or faster rate, investment in more sophisticated manufacturing and producing ventures begins to become attractive. But such investment has to wait until investors' experience widens and world recessionary forces recede. One of the greatest bottlenecks in such manufacturing investment is the demand bottleneck and that is in no small measure due to very low purchasing power among the huge masses of populations, especially rural populations in developing countries.

Meanwhile the second major direction of investment for oil-rich developing countries is in the development of their own economies. This is no doubt proceeding rapidly. Here too the first lines of investment are land development, construction of residential buildings, hotels and office accommodation and the provision of basic amenities and services like electric power, water supply and roads. Simultaneously, there is investment in trade and commerce and banking, often in collaboration with experienced business partners from abroad. The next line is the exploitation of natural resources like minerals and agriculture and the various unexploited sources of energy; and this is bound to be followed by investment in selected manufactures.

The newly-rich developing countries cannot think of producing any large quantities of consumer goods because that requires a part from adequate supplies of labour the existence of intermediate goods and machines and those are, in turn, dependent on the existence of mother-machines and complex capital goods. Moreover, the developed and some developing countries have reached a stage of such finesse and have acquired such an enormous advantage in the production of consumer goods that it is much cheaper for the rich developing countries to buy the consumer goods from them rather than attempt to produce these themselves.

While these developments are taking place, it is obvious that investment by the oil-rich countries in their own development at home is limited by their absorptive capacity and the size of their small markets. And this leads to the third major direction of investment, that is investment in the Third World or the non-oil South. As already indicated, some of the South countries are producers of food and raw material and investment in those lines will augment the food and raw material availabilities of the world as well as of the oil-producing countries. Thailand has, within less than a decade, increased its sugar production five-fold and its sugar exports sixteen-fold. Some other South countries have now the combined advantage of surplus labour, skilled labour, abundant raw materials and middle level technology in some lines

and advanced technology in other lines. These are powerful combinations and investment in these countries to achieve larger and newer production, more standardized production and export will not only benefit them in numerous ways—through greater employment, better balance of payments and more purchasing power for their masses—but will help other countries by providing a larger and almost limitless outlet for their trade and investment.

The returns to investments in many developing countries are substantial and the products of these investments can be made to flow to the investing oil countries as required and to the other countries as well. The terms and conditions for these investments can, of course, be negotiated between the governments and other investors, but these investments must be undertaken with a keen eye on long-term and medium-term comparative advantage.

In operational terms, it is one of the most compelling needs of the world that a study of dynamic comparative advantage in specified lines of production and investment and in selected countries be undertaken under the auspices of appropriate international organizations and the results passed on to potential investing countries, especially the OPEC. Another study of the potential rates of return to investments in specified lines and of the

terms and conditions under which investment from the OPEC can flow to other developing countries must also be undertaken promptly under international auspices and with full collaboration between the OPEC and the non-oil developing countries.

North-South Trade and Investment :
The Transnational Corporations

Recent cooperation among the developed nations has brought some order into the disorderly area of exchange rates and monetary behaviours. But the world, in particular the developed world, faces intractable problems of recessions and stagnations co-existing with inflations and indeed an all pervading energy crisis.

More specifically, the inflationary problem of the developed world is in no small measure due to a permanent labour shortage. As population growth in the developed world has slowed down while production and consumption continues, serious labour shortages have developed. To overcome this shortage either machines (automation) had to be substituted for men or more men had to be imported from labour-surplus countries—Turkey, Spain, Poland, India, Pakistan, West Indies etc. Both methods have been tried. It has turned out that machines are not always a full substitute for man especially in the growing service industries—hotels, transportation,

banking and insurance, shops, hospitals etc.—and hence the need for manpower has continued. The imported labour has to be paid the prevailing (conventional) wage and the multiplier effect of wage payments increases the demand for goods (high consumption). But the initial productivity of imported labour is generally low and continues to be low for sometime. The goods and services produced thereby do not match the demand for them—and hence inflation continues with a slow growth rate of output.

As the imported labour is brought in at the base level, the local—more skilled—manpower is pushed into higher jobs. But here this skilled manpower seems to be more dispensable and is better substituted by machines and other forms of capital. Hence unemployment arises and there is a co-existence of inflation, slow growth and unemployment—that is stagflation. Meanwhile, the importation of less skilled labour in large quantities has created a cultural and racial problem in several developed countries.

High inflation rates in the developed economies tend to price out the products of these economies—except the best and the cheapest—in the markets of the developing countries who are themselves industrializing and wish to export to developed countries. The developed countries see no alternative to setting up higher and higher tariff barriers and more and

more of them. This obviously peeves the developing countries and leads to international confrontations in world forums

A permanent labour shortage thus lies at the root of the developed economies' problem of stagflation. If labour cannot be imported easily and combined with capital fruitfully on home soils, the alternative for the developed economies seems to be to take capital and technology out to the developing countries and combine it with labour which is more plentiful there. In this manner, North's capital could be better employed and meaningfully combined with skilled labour; goods could be produced to Northern specification at a lower cost and the product could be exported to the North. The major instrument for bringing this about is the transnational or multinational corporation. This, of course, requires that the control of production be with Northern management, that certain flexibility in the management of and payment to local labour be guaranteed by the developing (host) country and that profits be allowed to be taken away to the developed country.

The developing (host) countries often object to this on the grounds that the terms and conditions of production and management do not favour them, that technology is not parted with by the guest companies, that differential rates of pay emerge between local labour and labour employed by the

guest corporations and that excessive profits may be taken away. They therefore insist on equity participation with a major share in equity and management going to the host country. This is not always acceptable to the visitors.

It can be demonstrated that under the circumstances prevailing in the world today, the importation of capital and technology from the developed countries and the combining of this with local labour to produce and export standardized goods is a mutually beneficial proposition by far and away. The local people get employment. Their training leads to skill formation and its percolation. Some technology can be made to be transferred. Standards of production improve locally through demonstration effects. Markets for the goods produced in developing countries are widened and exports emerge with good consequences for the balance of payments. Relative wage rates can be negotiated and settled and similarly the profit shares, equity shares and management shares can also be negotiated. The developing countries must be guaranteed a situation of no exploitation and of clear advantage, or else the transnational corporation may remain an instrument of exploitation.

The lines of production in which developed countries will locate their capital and transfer technology should not be chosen in an *ad hoc* manner but should obviously be based on an assessment

of dynamic comparative advantage. Here too, in operational terms it can be recommended that one of the most urgent needs of the moment is to set up under the aegis of international organizations a series of factor-endowment studies of the countries of the world—especially the developing countries—and another long term series of studies of dynamic comparative advantages in selected commodities based on factor-endowments. Besides, it ought to become one of the prime concerns of international and regional organizations to undertake analysis of the potential rates of return to investment in specified lines and of the terms and conditions under which investment can flow from the advanced countries to the developing countries.

Trade According to Dynamic Comparative Advantage

National economic development, intra-regional (South-South) trade and investment and international (North-South) trade and investment need not be in conflict but can be complementary to each other. But the basic concept which will make these complementary and not conflicting is again the concept of comparative advantage. The nations of the world ought to see the point that if the location of industries in different parts of the world and the export and import of the products of those industries were in accordance with comparative advantage, the benefits accruing to all concerned would be greater than through any other route.

Comparative advantage is basically cost advantage. But the cost advantage that is relevant for international specialization is not necessarily the cost advantage of the present time. Existing cost advantages could be and generally are the result of historical circumstances and not necessarily of basic endowments. If one country has industrialized for 200 years and the other is a newcomer to development, the latter would appear to be a high-cost producer in most lines, even though it may be better endowed in many lines of production. The idea propagated for a hundred years that India being an agricultural country should continue to produce and export cheap agricultural products and England being industrialized should produce and export industrial products, was obviously wrong because it did not consider the enormous endowments of India for industrial production including capital goods, and did not foresee that, given 25 years of industrial development, India would be a cheaper producer of many industrial goods compared to England. Thus it is tomorrow's cost structures rather than today's that are relevant, and in deciding rational industrial locations a *dynamic* comparative advantage, based on the assumption of a reasonably efficient exploitation of natural endowments, has to be worked out. International and regional organizations should make special efforts to get endowments established and internal rates of returns, or marginal efficiencies of investment and future benefit-cost ratios worked

out for a large number of projects in many lines of industry, all based on the assumption of a large-scale utilization of endowments. The results should be made available to the international community even though many or most countries may not yet find their way to buying the new ideas immediately. But the inherent logic and the compulsion of the situation will soon enable the countries of the world to view the idea with favour.

To say that country A and country B, respectively, have a clear comparative (future) cost advantage over other countries in the production of cement and sugar, does not mean that country A should take over all the cement production and country B all the sugar production from all other countries. It does not mean that all cement factories and all sugar mills have to close down everywhere in favour of A and B. It only means that a shift has to take place *at the margin* in favour of A and B, for cement and steel respectively, so that these countries, better endowed than others in these commodities, get the opportunity for large scale production of these and thus bring the benefits of scale economies and a further lowering of costs to all countries, leaving others to do a similar thing in other commodities.

The success of the European Economic Community is one of the most fitting examples in recent times of what amazing results can be achieved by

respecting the tenets of comparative advantage. This success was brought about by the members of the EEC by:

(i) agreeing to give up, at the margin, many lines of production in favour of the better endowed member-nations;

(ii) enabling each member to produce whatever it had to produce, on a large scale for the whole community rather than for itself and a few others, thus reaping the economies of scale (low-cost production);

(iii) undertaking a widening of the market by allowing the demand for any given product to come from the whole economic community rather than from one or a few countries; and

(iv) eliminating tariff barriers between all members.

The approach has been so clear and so successful that there should be no doubt about its efficiency when applied to other areas of the world.

Saving and Investment Within the National Economies

From all indications, the race between population

and production in the less developed countries (LDCs) is not going to be won easily in favour of production. A great deal of effort, attitudinal change and, above all, saving and investment activity would be required. In the absence of a Martin Luther to propagate Protestant Ethics or a Gandhi to bring home the need for restrained wants, the national leaderships of the LDCs have a big responsibility in containing consumption, in cutting out ostentatious consumption and in boosting up the attitudes and institutions in favour of savings and investment. If saving from the developed world and the new technologies can be obtained on reasonable terms and conditions, the task of the LDCs will be more manageable; but with or without the assistance from the First and the Second World, the Third World would have to undertake its own efforts and lift up by its bootstraps, so to speak, in order to get for itself a rapid growth-rate of production and a slower growth-rate of population.

Now, production can be got essentially through more investment and better technology. To the extent simple but efficient technology is already known to the LDCs, there should be arrangements for a free sharing of such technologies. I would go to the extent of saying that apart from government to government assistance within the LDCs, Third World multinational companies in the private as well as the public sectors could be constituted for trans-national investment and the transfer of technology

within the Third World. Of course these companies would work with adequate safeguards and without becoming monopolies or oligopolies, dominating the markets for specific goods. But the basic issue turns on mobilization of resources in poor countries for investment, and here taxation is the obvious answer. There is no doubt that the tax efforts of the LDCs would have to be mounted seriously and the tax base would have to be expanded, bringing larger numbers each year within the tax net. But at the same time there would be no point in making additional taxation self-defeating by overdoing the tax rates. Additional taxation, though large, would have to stop short of the levels at which tax evasion becomes rampant or incentives to work, save and invest are curbed. Marginal rates of income tax should not be allowed to rise to levels of 70, 80 and 90 per cent, as it happened in India some time ago, because at such rates honest citizens are pushed into tax evasion of a serious magnitude. There is currently too much evasion and dodging of indirect taxes too in less developed countries and large gains are to be had by a more thorough enumeration of small production units, plugging the loopholes in indirect taxation, discovering the elasticities of demands and supplies of various commodities, particularly the new ones, and adjusting the rates of tax to these technical elasticities rather than tax commodities randomly or on a conventional basis. It is true that certain items like kerosene and salt, and more recently, edible oils, simple clothing etc. are difficult

to tax, as these taxes are disliked by a large number of voters. Nevertheless, governments would have to show some boldness, especially in the early part of their tenures in bringing about a rational tax structure.

In most developing countries the pricing of the products of public enterprise is quite irrational. India itself is a star example. On the argument that public enterprises ought to work on a "no profit no loss" basis, a good deal of welfare is provided to workers even before the enterprise has begun to show the requisite profitability. At the same time, in the name of welfare, the consumers are cushioned too much by charging much too low a price for such items as electricity, transportation, irrigation, water, fertilizers etc. Thus, owing to the provision of welfare to consumers and workers even before it is feasible to do so, the enterprise ends up in a low price of the product and a high price for labour and establishment and, of course, with no returns or low returns. In fact, the "no profit no loss" formula gives to inefficient managers or fuzzy policy-makers a good pretext to cover up their inefficiency. The thing to do would be to employ managers and technical personnel in all public enterprises competitively, insist on a high degree of efficiency, introduce system of rewards and penalties, price the products so as to generate good profits and, subsequently, use these profits in a ploughback and expansion of the enterprise, or give them away openly and

advisedly for housing, hospitals and/or bonuses or additional wages etc. But the profit must come out in the open and the managers should be rewarded or penalized in accordance with their efficiency in generating surpluses in their respective enterprises. The moral has to be learnt by nearly all developing economies, that if you insist on welfare at the cost of efficiency and surplus, you will eventually end up in neither surplus nor welfare. But if you insist on surplus, you will get both the surplus and eventually the welfare.

There is a great deal of fuzziness and vagueness that surrounds economic policy, in particular, industrial policy and employment policy in less developed countries. This fuzziness must be removed and rationality built into the system. It is true that in view of excessive population growth and the consequent growth of demand for employment, there is a most urgent need to augment employment possibilities in the LDCs and to absorb labour effectively. This is a most difficult matter and yet it has to be undertaken. It is a tragedy of the LDCs in the current phase that even though they are creating additional jobs, by the millions every year, the number of job-seekers is increasing at an even faster rate. Judging by the increase in the number of jobs, employment is rising; but judging by the number of people, who could not get jobs, unemployment is also increasing.

To absorb more labour in agriculture, the provision of irrigation water, whenever possible, and introducing new water management techniques, seems to be the best bet. Apart from improving the output-capital ratio and output per unit of land, these measures would increase the number of crops and, indeed, give higher employment per acre. Employment will increase not only on the farms but insofar as additional output requires additional input production, additional storage and additional marketing etc. Millions of people will be absorbed in off-farm activities as well.

Recent experience has shown that the setting up of agro-processing industries like sugar mills in the rural countryside is an excellent vehicle for employment generation, income generation and transfer of industrial technology and investment to rural areas. The agro-processing units become excellent growth centres and serve to enhance productivity all round. And enhancing productivity per man in agriculture is nearly the whole point in less developed countries as this is the only way of enhancing the real wage rate and thus putting larger purchasing power in the agricultural sector. And thereby hangs a growth tale.

When it comes to the industrial sector, there is a facile view that putting a given amount of capital in several small enterprises gives greater employment per unit of capital than if the same amount of

capital was put in one or a few large ventures. This is only a half truth and much wastage may have already occurred in pushing a great deal of capital in the small-scale ventures and neglecting the large-scale enterprises. It is true that if 10 million rupees of capital was put in a single enterprise, this may give jobs to workers and if the same amount was diffused in 50 small enterprises, workers may be employed. At this everybody feels happy and proclaims that the employment potential of small enterprises is very high and higher at any rate than the larger ones. This, however, is only a first stage result. What is forgotten is that the many small incomes which small enterprises generate, tend to be wholly consumed and their saving potential and ploughback into further expansion is very small. Large enterprises on the other hand, generate fewer but larger incomes with larger saving and ploughback possibilities. Moreover, because the large enterprises have economies of large scale (low cost per unit of output) through a more efficient management, use of power and modern technology, these are excellent vehicles for surplus generation, investment and employment expansion in the second, third and subsequent rounds. This is why, while in the first stage, small enterprises may appear to be providing a good deal of employment, they are probably not competitive in most cases with large enterprises in generating second and third stage employment.

There is, however, no doubt that with the small over-head costs of small enterprises, if trained management, power supply, standardized raw material supply and improved technology could be combined and marketing efficiently undertaken, small enterprises can become the vehicles both of larger output per unit of cost and larger surplus and employment generation per unit of capital. The developing countries, each in its own set-up, through its own experience, would have to decide on a judicious and efficient mix of large and small enterprises.

Thanks to rapid population growth the labour market in most Third World countries is getting badly flooded. There is a structural shortage of jobs. Young people, many of them living in a democratic set-up, will not keep quiet until employment, bread and butter, education and training is made available to them. They will clamour for it vigorously and peace could be easily disturbed if the demands are not taken note of with sensitivity. It would be necessary for the developing economies now to embark on major efforts towards manpower planning. Planning would have to go beyond merely physical capital planning into the use of manpower.

Today millions of young people are placed in a university department of faculty in almost total disregard of their aptitudes on the one hand and

the market requirements on the other. We may be sure that most of them are wrongly placed in the academic, professional or vocational locations in which they are placed. What is needed is a large number of training programmes, rather simple in nature, say of one year's duration which absorb a large number of young people immediately after high school, guarantee a small stipend during training and a job with reasonable pay at the end of the training period. There could be yet another slightly longer and more sophisticated training programme requiring a slightly higher age, greater proficiency and a longer waiting period but nevertheless with a guarantee of a stipend as well as a higher job with higher pay immediately after training. Beyond these training programmes, the universities could attract those who prove themselves to be more competent and who would have to wait for 3 or 5 years of a degree course before they get a fairly high-paid employment. Such choices are not available to young people in most of the Third World countries today and that is why everyone clusters at a university and everyone becomes the cause of bringing down the standard through an onslaught of numbers. Manpower planning geared to the state of demand on the one hand and talent availability on the other, would have to be taken to heart in the Third World countries if serious explosions are to be avoided.

It is certain that taxation and profits of public

enterprises will not give the governments of LDCs the resources required to push economic growth rapidly enough. A mere fiscal and monetary tinkering would not yield the desired results and new resources would have to be thought of. Now it is destiny itself, that in the thickly populated Third World countries, the villages become towns, large towns and large town-cities. The land values in the concentric circles around these population units continue to rise over time and the benefits of this rise accrue in the shape of unearned or fortuitous gains to the owners of these lands. There is no reason why these gains should accrue to private parties who have not worked for them and should not accrue to the community as a whole. What seems important is that LDC governments should allot sufficient funds for a phased self-augmenting programme of land purchase in concentric circles around growing Population Centres.

These lands should then be developed through the employment of the existing unemployed engineers, architects and skilled and unskilled labour. After providing electricity, water supply and other basic amenities, these lands should be sold at tomorrow's prices, thus collecting higher receipts which will accrue both through passage of time and through land development. The surplus accruing to the state from the difference between the purchase and sale price of these lands could be

devoted: (a) to the purchase and subsequent sale of more land and to the planning of public and private sector production units, housing units etc., within the concentric circles itself; (b) to tax reduction, if necessary; and (c) to subsidize and encourage suitable development programmes. It seems very probable that the additional resources generated through such would be very large and would add substantially to other resources, obtained from taxes and profits of public enterprises.

In this lecture I have not dealt with the compelling energy shortage which harms the developing world more than any other group of countries. Today even agricultural production is hampered by electrical power shortage. The sharp increases in oil bills have been seriously undermining the efficiency in less developed countries. In the case of India the current oil bills work out to be more than Rs. 5 billion per annum. Petroleum exploration would have to be continued and more of it undertaken. The conservation of energy and various fuels is absolutely essential and fiscal and other programmes would have to be devised in this direction. Alternative sources of energy such as atomic and solar energy would have to be discovered. But it is too much to expect that in the next two or three decades the Third World will be a leader in energy production. It will probably be able to adapt and make use of some of the technological discoveries to be made in the

developed countries and thus reduce some of its energy privations. By and large, in the next half century the Third World would have to save itself by its own exertions and learn by its own example.

Dr. A. M. Khusro

22 February 1980